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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,889

03/12/2004

Masayuki Takahashi

040113

4896

23850

7590

12/04/2006

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EXAMINER

OMGBA, ESSAMA

ART UNIT

PAPER NUMBER

3726

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,889

Applicant(s)

TAKAHASHI ET AL.

Examiner

Essama Omgba

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/12/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of the invention of Species (A), claims 1-5, in the reply filed on September 11, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

2. The abstract of the disclosure is objected to because in line 18, "haves" should read --halves--. Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: on page 3, line 15, "baring" should read --bearing--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Pirault et al. (US Patent 4,884,900).

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With regards to claim 1, Pirault et al. discloses a bearing member manufacturing method of manufacturing a bearing member having a body part 16 formed of a first material of a light alloy (column 2, lines 13-14), and a bearing part 24 formed of a second material of a light alloy material different from that forming the body part (col. 1, lines 43-44 and 47), wherein the body part 16 (second workpiece) is cast around the bearing part 24 (primary workpiece) to combine body part 16 and bearing part 24 and subsequently dividing the primary workpiece into halves along a center plane including a center axis 24 of the inside surface to obtain two secondary workpieces for forming two bearing faces (col. 2, lines 40-41 and 47-48 and figure 2). Applicant should note that it is inherent that the casting will take place in a mold as is conventional in the art and that the dividing step will take place after removal from the mold.

For claim 2, Applicant should note that such casting step is conventional in the art.

For claim 3, Applicant should note that the shape of the semi-finished workpiece lends no patentable weight to the method being claimed.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pirault et al. in view of Beyer-Steinhauer et al. (DE 19959540).

Pirault et al. discloses a bearing manufacturing method as shown above.

Although Pirault et al. does not disclose the molten first material being poured into the cavity so as to flow in a swirling current in the cavity, however it is known to pour molten material in mold cavity in a swirling current so as to promote uniform flow of the molten material inside the mold as attested by Beyer-Steinhauer et al., see abstract. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have poured the metal in the method of Pirault et al. so as it flows in a swirling current in the mold cavity, in light of the teachings of Beyer-Steinhauer et al., in order to promote uniform flow of the molten material inside the mold.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pirault et al. in view of applicant's admitted Prior Art (AAPA).

Pirault et al. discloses a bearing manufacturing method as shown above except for an aluminum alloy having a high silicon content being used as the second material. However it is known to use an aluminum alloy having high silicon content for such material as attested by Applicant at pages 1-3 of the specification to be known as AAPA. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have substituted the material of the bearing part of Pirault et al. with an aluminum alloy having a high silicon content as taught by AAPA, in order to achieve thermal expansion similar to that of the shaft at the bearing seat.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to read 'Essama Omgba', written in a cursive style.

Essama Omgba
Primary Examiner
Art Unit 3726

eo
November 27, 2006